[SEGMENTED COLLIMATOR ASSEMBLY] Abstract

A detector assembly is provided comprising a collimator assembly. The collimator assembly comprises a first collimator segment having a first left end and a first right end. The first collimator segment includes a plurality of first segment longitudinal walls having a first segment depth. Each of the plurality of first segment longitudinal walls includes a first interlocking protrusion comprising only a portion of the first segment depth. The collimator assembly also includes a second collimator segment having a second left end and a second right end. The second collimator segment comprises a plurality of second segment longitudinal walls having a second segment depth. Each of the plurality of second segment longitudinal walls includes a second interlocking protrusion comprising only a portion of the second segment depth. Each of the second interlocking protrusions engages one of the first interlocking protrusions to form a continuous sidewall segment.